

ABSTRACT

An MPEG-2 transport stream multiplexer architecture includes an input-buffered multiplexer with a simple Longest Queue First (LQF) arbitration algorithm which is enhanced by use of intelligent buffer metering and flow control circuitry. The use of intelligent buffer metering allows the multiplexer to implement maximum and minimum bandwidth guarantees on a per-channel basis. The simplicity and inherent parallelism of this architecture allows for an efficient hardware implementation.